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ABSTRACT

The Rural Education Program (REP) of the Northwest Regional Educational Laboratory (NWREL) is developing a strategy for involving rural communities and school systems in a systematic problem solving process. This Rural Futures Development (RFD) Strategy is based on the theoretical works of such people as Havelock, Lippit, Bales, Williamson, Schmuck and Runkel and on NWREL's field based development efforts. This paper presents: (1) an overview of the RFD Strategy and its related products, (2) a discussion of the three phases of the evaluation of the strategy and (3) an examination of the interactive procedures between developers and evaluators in the formative evaluation of products which are integral to strategy installation. Essentially, the strategy consists of (1) the training and field involvement of process facilitators (outside change agents) who introduce the strategy and share problem solving and decision making skills with local people, (2) the development of a representative local school-community group, and (3) the collaborative involvement of the school system and school-community group in identifying and solving local educational problems. (Author/RC)

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# DEVELOPERS AND EVALUATORS ENGAGED IN FORMATIVE PRODUCT DEVELOPMENT

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# DEVELOPERS AND EVALUATORS ENGAGED IN FORMATIVE PRODUCT DEVELOPMENT

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April, 1976

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# DEVELOPERS AND EVALUATORS ENGAGED IN FORMATIVE PRODUCT DEVELOPMENT


## Abstract

This paper presents (1) an overview of a strategy for involving rural communities and school systems in solving local educational problems, (2) a discussion of the evaluation phases of the strategy, and (3) an examination of the interactive procedures between developers and evaluators in the formative evaluation of products integral to the strategy. Development and evaluation roles are discussed in relation to the exploratory test procedures for identifying and selecting reviewers, developing test schedules, constructing instruments, conducting the test, and reporting the results.


## Introduction

The Rural Education Program (REP) of the Northwest Regional Educational Laboratory (NWREL) is developing a strategy for involving rural communities and school systems in a systematic problem solving process. This Rural Futures Development (RFD) Strategy is based on the theoretical works of such people as Havelock, Lippit, Bales, Williamson, Schmuck and Runkel and on our own field based development efforts. This paper presents: (1) an overview of the RFD Strategy and its related products, (2) a discussion of the three phases of the evaluation of the strategy and (3) an examination of the interactive procedures between developers and evaluators in the formative evaluation of products which are integral to strategy installation.

## An Overview of the RFD Strategy

Essentially, the strategy consists of (1) the training and field involvement of process facilitators (outside change agents) who introduce the strategy and share problem solving and decision making skills with local people, (2) the development of a representative local school-community group, and (3) the collaborative involvement of the school system and school-community group in identifying and solving local educational problems.

## AN OVERVIEW OF EVALUATION OF THE STRATEGY

During the past few years, the product and process pieces of the RFD Strategy have been in various stages of development. The products currently reflect varying degrees of reliance on theoretical concepts and on field based development and testing. Since the summer of 1974 the primary thrust of the Program has been on the installation and evaluation of an integrated RFD Strategy. To this end the Program began the first trial of the integrated strategy in September 1974, in what is designated as Site A. Currently a second installation--designated as Site B--is underway.

Site A. Site A serves as the setting for the first tryout of the integrated RFD Strategy. In this site, evaluators are chiefly concerned with providing data to facilitate the refinement and delineation of the RFD Strategy definition prior to its installation in Site B.

Site B. Site B involves a test of the importance, efficacy, and integration of the RFD Strategy and related RFD products. In Site B, evaluators are concerned with (1) the degree to which the Strategy was implemented (as reflected in its process objectives) and (2) the extent to which the Strategy's outcome objectives are met. Unanticipated consequences of RFD adoption will also be noted.

The exploratory tests. The exploratory tests provide the development staff with information that they can use in revising specific products preparatory to their use when the integrated strategy is installed in a site.

Thus, the strategy evaluation includes three major phases: (1) the exploratory test of individual products, (2) the evaluation of the first installation of the strategy which is intended to identify the gaps, redundancies and major weaknesses in the strategy leading to its refinement and (3) the evaluation of a second installation which is to be comparative and thus a more rigorous examination of the effects of the RFD Strategy. The paper will focus on the interaction between developers and evaluators in the exploratory test of products within the context of the overall evaluation of the strategy.

The following products, developed for use with the strategy, were included in the exploratory tests. Under each product title a short description is provided of the contents and purpose of the product.

1. RFD Manual for School-Community Process Facilitators

The process facilitator manual is designed to help teams of process facilitators (PF teams) work with the school staff, the school board, school leaders, and the school-community group (SCG) in the local School-Community Proccess of the RFD Strategy. Its primary purpose is to provide these teams with a structure for their consultation and a set of procedures and resources for adapting the process to meet individual school and community needs. A secondary purpose is to help process facilitators to maintain positive team relationships, as well as to strengthen their relationship to their hiring agency.

2. RFD Guide for Training School-Community Process Facilitators

This training guide is designed to enable trainers to provide appropriate training activities for process facilitators. Such training will enable them to gain and exhibit a wide range of skills essential to their work.

3. RFD Guide for Schools

The school guide is directed at school staff members and is designed to support and guide their participation. The guide contains background information, step-by-step guidelines, and resources.

4. RFD Notebook for School-Community Groups

The SCG notebook is directed at SCG representatives from the school staff, the student body, and various community organizations. It, too, contains materials that are designed to support and guide the group's participation.

5. RFD Guide for School Boards

The school board guide is designed to provide school board members with materials and procedures for recording, organizing, and retrieving information necessary for their participation in the RFD Strategy. In the guide a systematic approach to problem solving is also outlined, along with a discussion of the leadership styles and functions that are compatible with the RFD Strategy.

Evaluative Questions

The exploratory tests are formative product evaluations designed to provide developers with valid and reliable data for use in product revision. These tests focused on questions, identified by developers, in regard to the product's objectives, content, format and intended use. The major questions for the exploratory tests are as follows:

A. Goals and Objectives

1. Are the goals and objectives of the product appropriate and well defined?
2. Are there goals and objectives which should be added, eliminated, or revised?

B. Content of the Product

3. Does the product content match with the specified goals and objectives?
4. Is the content of sufficient scope and detail to serve the needs of intended users?
5. Are the content and writing style appropriate for the prospective audiences?
6. Should any material be added to or deleted from the product content?
7. Are there any critical competitors for the product?
8. Is the content compatible with the RFD Strategy?

C. Intended Uses of the Product

9. Does the product consider the important characteristics of its prospective audiences?
10. Is this product piece essential to the RFD Strategy?
11. Are the reference and resource materials appropriate and adequate to meet the needs of intended users of the product?

D. Format and Graphics

12. Is the material sequenced appropriately?
13. Does the table of contents provide ease of reference to the product?
14. Is the graphic layout appropriate for a rural educational setting?
15. Are the charts and graphs easy to read and understand?
16. Do the visual aids promote better understanding of the product content?

E. General Questions

17. What positive or negative side effects are likely to result from the use of this product?
18. What are the reviewer's general overall impressions of the product?

## The Design of the Exploratory Test

To answer the above questions the REP employed panelists to read and review each product. The panel review approach was selected for two reasons. First, it is a relatively efficient and inexpensive way to collect data concerning needed revisions. Second, it provides an opportunity to acquire information from multiple sources.

In the Exploratory Tests reviewer annotations and comments about the product as well as their questionnaire responses were summarized and provided to the development team. The interactive procedures between developers and evaluators in these tests are discussed below.

A preliminary meeting was held between developers and evaluators to specify the procedures for the exploratory tests. At this meeting four reviewer populations were identified as appropriate participants for the exploratory test.

1. Experts in the product's substantive areas
2. Potential users of the product
3. REP colleagues who had developed related materials
4. NWREL personnel with expertise related to the product (optional)

Two additional qualifications were established. First, some of the reviewers had to be able to provide information about the existence of critical competitive products. Second, no reviewer was to have been directly involved in the development of the product. This last qualification did not exclude those who had previously been employed exclusively for the purpose of critiquing the product.

Procedures were also outlined for identifying and selecting reviewers, developing schedules, constructing instruments, conducting the test and reporting results.

The minutes of this preliminary meeting were prepared in outline form and presented to the Administrative team, a three-man team composed of the coordinators of management, development, and evaluation units. The Administrative team then approved (with minor modifications) the procedures for the conduct of the exploratory tests.

To help insure selection of a representative and qualified group of reviewers, development team leaders prepared a list of qualifications and suggested names, in each of the four categories, of people who might review their products. These lists were provided to the Administrative team who identified a pool of prospective reviewers meeting the specified qualifications and selected an eight to ten member review panel for the product. With one exception a separate review panel was selected for each product: due to the interrelated and complementary nature of the process facilitator manual and training guide, only one panel was selected to review both these products. Lists of the review panelists for each product are presented in Appendix A.

Each panelist was asked to sign an agreement stating his or her willingness to serve as a reviewer until the completion of the exploratory test. Each external reviewer received an initial stipend with the understanding that complete remuneration would await receipt of all data.

Because of the development schedules and product length, it was agreed that each product could be divided and tested in up to six distinct pieces. This agreement also permitted reviewers to examine portions of the products sequentially rather than to review the complete product at one time. In accordance with this decision, the Developmental Schedule of Product Pieces for Exploratory Testing was developed. See Appendix B. Based on it, an Exploratory Test Schedule was also developed, establishing, as a minimum, eight working days for production, one calendar week for review, and six days for mailing each product (three days to and three days from the reviewers). The only exception to this schedule was that two weeks were allowed for review of Piece 1 of the training guide. Appendix C presents the Exploratory Test Schedule.

## Instrument Construction

The exploratory test was designed to answer questions related to a product's objectives, content, format, and intended use. Questions appropriate to all RFD products were identified in meetings with development team leaders and the Visual Communications Unit coordinator.

Additionally, questions relating to specific products were identified by the evaluator and development team leader for those products. A few questions specifically addressed to REP colleagues or NWREL expert reviewers were also identified.

Based on these questions, items were constructed and a questionnaire for each RFD product was developed. (See Appendix D for a sample Exploratory Test Questionnaire.) Before each test questionnaire was actually used, it was reviewed by members or representatives of the following groups:

1. The Product Development Unit
2. The Research and Evaluation Unit
3. NWREL's Office of Research and Evaluation Services
4. The REP representative for the Protection of Human Subjects

Conducting the Exploratory Test

At the initiation of each exploratory test, an orientation meeting was held (April 8 and 9, 1975), attended by the reviewers selected and product development and evaluation teams.[2] The purpose of the orientation was to ensure that the reviewers shared a common understanding of their task. At the meeting each reviewer received: (1) a statement of RFD goals and objectives, (2) a statement of the product's goals and objectives, (3) an exploratory test schedule that indicated the dates when product pieces would be mailed to reviewers, the review time for each, and the dates when review annotions and questionnaires should be returned.

The first review packet was presented to reviewers at the orientation meeting, with successive packets mailed (with minor modifications) according to the Exploratory Test Schedule. Each review packet consisted of a questionnaire and two copies of the product piece (one for the reviewer to keep for reference during review of subsequent pieces and one to annotate and return). Reviewers were asked to annotate the materials, respond to the product questionnaire, and return both annotations and questionnaires for analysis. Follow-up procedures were developed to guard against late return of review materials.

The dates of major exploratory test events are presented in Table 1.

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[2] One reviewer was unable to attend the orientation meeting. Another reviewer having expertise in the same area was, thus, asked to assume the original reviewer's task.

TABLE 1
SCHEDULE OF MAJOR EVENTS FOR
EXPLORATORY TESTS

| | Event | Date |
|---|---|---|
| 1. | Specific Development Schedules for RFD Products and Procedures for Exploratory Tests Approved by the Administrative Team | March 5, 1975 |
| 2. | Qualifications for Panelists Prepared by Development Team Leaders | March 12, 1975 |
| 3. | Exploratory Test Review Panelists Selected by the Administrative Team | March 17, 1975 |
| 4. | Exploratory Test Schedule Finalized | March 26, 1975 |
| 5. | Exploratory Test Questionnaires Prepared | March 27, 1975 |
| 6. | Review of Questionnaire Completed by Developers, Evaluators, NWREL's Office of Research and Evaluation Services, and the Party Responsible for Protection of Human Subjects | March 28, 1975 |
| 7. | Orientation Meeting of Review Panelists for the | |
| | A. PF Manual and Training Guide | April 8, 1975 |
| | B. School Guide, School Board Guide, SCG Notebook | April 9, 1975 |
| 8. | Informal Exploratory Test Reports Prepared for the | |
| | A. PF Manual, Pieces 1-6 | |
| | B. Training Guide, Pieces 1-3 | |
| | C. School Guide, Pieces 1-4 | |
| | D. School Board Guide, Pieces 1-4 | April 8 to June 30, 1975 |
| | E. SCG Notebook, Pieces 1-4 | |
| 9. | Formal Exploratory Test Reports | |
| | A. PF Manual | |
| | B. Training Guide | |
| | C. School Guide | |
| | D. School Board Guide | July 1 to October 1975 |
| | E. SCG Notebook | |

Data Analysis and Reporting

For each product piece, an informal report was prepared by evaluators and provided to developers within a two-week period following receipt of data. These informal reports consisted of four types of data:[3]

1. Tabulation of types of reviewer annotations in three categories: positive comments, negative comments and suggested alterations.
2. Summary of frequently suggested alterations from annotations
3. Frequency tabulations for forced choice questionnaire items
4. Summary of frequent comments to open-ended questionnaire items

Reviewer comments and annotations of frequency three or greater were always included in the informal reports, along with comments and annotations that occured less frequently when these promised to be useful in improving the product. This decision was made so that the reports would be more concise and helpful to development team leaders who were revising the product.

After the preparation of each informal report the developer and evaluator met to discuss the report including any comments and implications of the data. Following this meeting the developer and evaluator interacted whenever necessary to clarify information and issues from the reports.

An agreement was reached by the development and evaluation units that the development team leader would assume the responsibility for making decisions about product revisions. However, these decisions were subject to approval of the development coordinator and program director.

Developers used the following criteria to determine which test data would be used as the basis for revisions:

* Consistency with RFD assumptions, research base, and field experience base.
* Strength and frequency of comment made by reviewers.
* Importance or significance of comment.
* Usefulness to the development of the prototype product.
* Helpfulness with correcting unintentional errors or omissions.
* Contribution to internal and cross-product consistency.
* Likelihood of developers completing changes within their timelines and resources.

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[3] For samples of these forms see pages V-2 to V-6 and VII-4 of the Exploratory Test Report: RFD Guide for Training School-Community Process Facilitators. Rural Education Program, Northwest Regional Educational Laboratory, 1975.

For each product, a final exploratory test report was prepared jointly by the development and evaluation teams. This report identified the major exploratory test results and recommended revisions based on these results. Major results were defined as product strengths and weaknesses identified by forty percent or more of the reviewers.

For the final report evaluators prepared chapters on the "Design of the Exploratory Tests" and "Major Exploratory Test Results." The results from the compiled informal reports were included as appendices in the final report.

Developers prepared a chapter on the "Conclusions and Recommendations" which documented the most significant revisions based on the major exploratory test results. In no cases were high frequency exploratory test data (40 percent or more) ignored; if the data were not used as the basis of revisions, rationale statements were prepared to document the omissions. A complete list of all proposed revisions from the exploratory test data, REP colleague review, consultant advice, literature search and the developers own insights was also included as an appendix in the final exploratory test report.

## Results of the Exploratory Tests

This section presents the major exploratory test results from the Training Guide, one of the five RFD products. Although these results are specific to one product we feel they are fairly representative of the type and content of the results from the other RFD products.

In presenting the results under each of the questionnaire sections we will indicate the questions posed to reviewers, the reviewers' responses, and the developers' recommendations for revision.[4,5]

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[4] For Additional information regarding exploratory test results and developers revisions based on these results, see Appendices VI, VII, and VIII in the Exploratory Test Report: RFD Guide for Training School-Community Process Facilitators. Rural Education Program, Northwest Regional Educational Laboratory, 1975.

[5] Developer's recommendations for revision were prepared by Hans Johnson and Greg Druian of the Northwest Regional Educational Laboratory.

I. Goals and Objectives

A. Questions posed. In the area of goals and objectives, reviewers were asked

* if they perceived discrepancies between the product's goals and objectives and the particular section being reviewed

* if the goals and objectives were stated clearly enough

* if any should be eliminated, added, or revised

(See questions 1-4 of the questionnaire, Appendix D.)

B. Reviewers' responses. The reviewers indicated that the goals and objectives were generally comprehensive and well stated.

C. Developer's recommendation. No revisions in goals or objectives are planned for this product.

II. Content

A. Questions posed. Reviewers were asked

* to assess the scope and detail of the product, paying particular attention to the guidelines for organizing and conducting training sessions

* if materials need to be added to or eliminated from the product

* if the product was appropriate for a rural audience

* if the product content matched its goals and objectives

* if it was similar to other materials with which the reviewer was familiar

(See questions 5-11 and 25-30 of the questionnaire.)

B. Reviewers' responses Four reviewers felt that additional detail was needed in Piece 3. They felt that the guide presented enough information for organizing and conducting training sessions and for selecting appropriate training activities for the sessions.

Reviewers also indicated that there were materials which should be added to or eliminated from the product. The following are some of the changes which were suggested for a given product piece.

Piece 1:

Reviewers felt that trainers would need a workshop to teach them their roles and responsibilities. They also indicated that procedures should be specified for periodic assessment, quality control, and updating of trainers in critical professional areas--knowledge, skills, and attitudes. For the first piece, reviewers also indicated that more examples were necessary.

Piece 2:

The situation activities in this piece were seen as very helpful. They were useful, relevant, and likely to achieve the goals set for them.

Piece 3:

Reviewers felt that repetition of the core activities for each phase was unnecessary and that more information was needed about building PF teams. Activity F of the Orientation phase was seen as weak and in need of improvement.

The sample training activities were generally seen as useful, relevant, and likely to achieve their goals, though half the reviewers felt that some activities would fall short of their goals.

In summary, the content was viewed as appropriate for use in a rural educational setting. The materials were generally easy to read and understand, and the content was well matched with stated goals and objectives. In addition, few critical competitive products were identified that could be used in place of this product or its parts.

C. Developer's Recommendation. Several content revisions, mostly in the sample training activities, are planned on the basis of test results.

In the guide itself, examples will be provided to illustrate ideas, concepts, and abstractions. These will occur as narrative examples in the text and also as sample forms and guidelines in the various resource sections.

One misconception shared by several reviewers was that the guide would also be used to train PF trainers. Since this is not the case, several suggestions for procedures, tools, and resources that relate to PF trainer training will not be incorporated in the guide. However, the introduction will be rewritten to clarify the scope of the guide.

In the sample training activities, several samples will be added to focus on PF work in problem-solving applications and group facilitation with the school staff, school leaders, and the school board.

The core activities will be presented only once, early in the sample training activities, rather than attached to each training phase. Also, one page of Core Activity F was misplaced, leading reviewers to comment that enough information was not provided on PF team building, the subject of the activity. This page will be restored in the prototype version, and some additional information on PF team building will also be added.

Additionally, the goals of all activities will be revised to focus on realistic PF outcomes rather than trainer outcomes, so that the activities can reliably be expected to accomplish the goals.

III. Intended Uses

A. Questions posed. Reviewers were asked to consider

* how well the product piece accounted for the important characteristics of its intended users

* if it was necessary to include the product in the RFD Strategy

* the adequacy of the resource materials included or referenced in the product

* the adequacy of the information concerning additional resources

(See questions 12-16 of the questionnaire.)

B. Reviewers' responses. Reviewers were ambivalent in their remarks concerning the characteristics of intended user populations. In Pieces 1 and 3, reviewers felt that the characteristics of intended users needed more attention. However, they felt that Piece 2 adequately considered the important characteristics of its intended users.

All reviewers considered the product an essential element in the RFD Strategy. They felt that the resource materials were adequate and that there was enough information to assist users in locating additional materials.

C. Developers' recommendation. No single revision is planned to address the issue of the product's match with its intended user population. Rather, the entire narrative and all training activities will be revised with audience characteristics in mind.

Although resources appeared to be adequate and reviewers found them helpful, they suggested other resources, which will be included in the prototype product. In addition, more frequent cross-referencing to resources in the guide and the PF manual will be added.

Also on the basis of reviewer comment, a more comprehensive discussion of adapting training activities will be included in the guide, and all time estimates on sample training activities will be reviewed and, if necessary, modified.

IV. Format and Graphics

A. Questions posed. In regard to the product's format and graphics, reviewers were asked to pay particular attention to

* the sequence of material in the product piece

* the table of contents, headlines, and titles

* the usability of the charts and graphics

* the general graphic layout, paper color, drawings, symbols, and other visual aids

(See questions 17-24 of the questionnaire.)

B. Reviewers' responses. Reviewers generally agreed that the material was appropriately sequenced within the product and that the table of contents, headlines, and titles were satisfactory. They noted, however, that the indexing system for resources should be improved to allow easier cross-referencing. The charts and graphs within the product were generally easy to read and understand, but half of the reviewers indicated that the charts in Piece 1 should be enlarged. Reviewers also indicated that the format of the notebook was satisfactory.

In Pieces 1 and 2 at least 50 percent of the reviewers felt that the graphic layout was appropriate for use in a rural educational setting. Reviewers indicated for Piece 3 that the visuals should be more artistic and creative. For Pieces 1 and 2, half of the Reviewers indicated that changes were needed in the graphic layout. While they thought that the visual aids promoted understanding of the material, two-thirds of them noted that the drawings in Piece 1 should relate more closely to the content material.

C. Developer's Recommendation. The complexity of the labeling system for the sample training activities will be greatly reduced and the system clearly described on a sample page. This revision and the inclusion of only one description of core activities will result in greater ease in cross-referencing the activities.

Where charts are used, the type face will be at least 6 point for legibility, and the layout will be simplified.

The guide will be illustrated with a continuous graphic design, flowing throughout the test, to add visual interest, and to break up long narrative passages.

V. Summary Concerns

A. Questions posed. Reviewers were asked

* to indicate the positive and negative aspects of the product
* whether the changes they suggested were relatively minor or
* if they were major ones requiring significant revision
* if they felt that development of the product should cease

(See questions 32-35 of the questionnaire.)

B. Reviewers' responses. One-half of the reviewers felt that only minor changes in the product were needed, while four reviewers suggested that major changes were needed for the product. None of the reviewers recommended that development of the product should cease.

C. Developers' recommendation. Although several reviewers suggested major revisions to the guide, these revisions were generally unique for a given reviewer. Most suggestions have been addressed in preparing the above recommendations for revision.

Conclusion

This paper has attempted to show that developers and evaluators can work together quite effectively in the formative evaluation process. Such interaction should lead both to the development of high quality educational products and to more cooperative relationships between developers and evaluators. The exploratory test plan and procedures presented in this paper may be of some value for other developers and evaluators who are engaged in a similar enterprise.

# APPENDIX A
# EXPLORATORY TEST PANELS

## APPENDIX A
## EXPLORATORY TEST PANELS

I. Manual/Training Panel

Reviewer

1. William Lassey
   Department of Rural Sociology
   Washington State University
   Pullman, Washington

2. Charles DeRitter
   Regional Training Officer
   U. S. Forest Service

3. Mark Milliman
   School Board Chairman and
   Instructor, Division of
   Continuing Education
   Oregon State System of
   Higher Education

4. David Curry
   Secondary Education and
   Administration Specialist
   Oregon State Department of
   Education

5. William Ferguson
   English Consultant
   Office of the Superintendent
   of Instruction
   Helena, Montana

6. Martha Harris
   Curriculum Specialist
   Eugene Public Schools, Oregon

7. Jane Arends
   Center for Education Policy
   and Management
   University of Oregon
   formerly REP staff member

8. Warren Adams
   REP staff member

9. Ruth Emory
   Improving Teaching Compentencies
   Program
   Northwest Regional Educational
   Laboratory

10. Rene Pino
    Improving Teaching Competencies
    Program
    Northwest Regional Educational
    Laboratory

II. School Guide Panel

Reviewer

1. Margaret Nelson
   Intermediate Education District
   Washington County, Oregon

2. Mark Milliman
   School Board Chairman and
   Instructor, Division of
   Continuing Education
   Oregon State System of
   Higher Education

3. Richard Withycombe
   Portland Public Schools/
   Oregon State University

4. Darrell Clukey
   Oregon Episcopal Schools

5. Marilyn Curry
   former school teacher
   Oregon Public Schools

6. Garry Fendell
   Principal of Zillah High School
   Zilla, Washington

7. Bertha Mansker
   School Teacher
   Colton, Oregon

8. Ray Jongeward
   REP Staff Member

9. Samellyn Wood
   Freelance Developer and
   Evaluator
   formerly REP Staff Member

IV. School Community Group Notebook

Reviewer

1. Lawrence Horyna
   College of Education
   University of Oregon

2. A. D. Luke
   State Department of Education
   Boise, Idaho

3. Richard Withycombe
   Portland Public Schools/
   Oregon State University

4. Gilbert Anzaldua
   Director of Compensatory
   Education Programs
   Oregon State Department of
   Education

5. William Monroe
   School teacher
   Sheridan, Oregon

6. Pat Tift
   former member of School
   Community Group
   Brewster, Washington

7. Jane Arends
   Center for Educational Policy
   and Management
   University of Oregon
   formerly REP staff member

8. Keats Garman
   REP staff member

III. School Board Guide Panel

Reviewer

1. Clyde Brown
   School Superintendent
   Brewster, Washington

2. Ray Talbert
   Educational Coordinates
   Northwest
   Eugene, Oregon

3. Max Abbott
   Director of the Center for the
   Advanced Study of Educational
   Administration
   University of Oregon

4. Alta Fosback
   School Superintendent
   Carlton, Oregon

5. Mark Milliman
   School Board Chairman and
   Instructor, Division of
   Continuing Education
   Oregon State System of
   Higher Education

6. Ragnor Anderson
   School Board Member
   Colton, Oregon

7. Ray Haag
   Assistant Superintendent
   Intermediate Education District
   Washington County, Oregon

8. Jane Arends
Center for Educational Policy
and Management
University of Oregon
formerly REP staff member

9. Roger Bishop
Freelance curriculum developer
and consultant
formerly REP staff member

# APPENDIX B
# DEVELOPMENT SCHEDULE

Development Schedule
of Product Pieces for Exploratory Testing

| DATE | Process Facilitator Manuals | Training Guide and Materials | School Guide | School-Community Notebook | School Board Guide |
|---|---|---|---|---|---|
| MAR 6 | Product Pc.1 Unit I,Sec.I & II,Unit V, Section I "Overview & Introduction" "Resources" | | | | |
| MAR 7 | | | Product Pc.1 Unit I,Sec.I & II, Unit V Sec. I "Overview/Intro." "Resources" | | |
| MAR 18 | | | | Product Pc.1 Unit I,Sec.I & II, Unit V Sec. I,"Overview/Intor." "Resources" | |
| MAR 21 | Product Pc.2 Unit II, Sec. I & II "Guidelines for Process Facilitation" | | | | |
| MAR 28 | Product Pc.3 Unit II, Sec. III,"Guidelines,Sample Instruments & Activity options: Phases I & II | | | | Product Pc. 1 Unit I,Sec. I & II, Unit V, Sec.I "Overview/Intro." "Resources" |
| MAR 30 | | | Product Pc.2 Unit II,Sec.I II & III."RFD Educational Problem Solving" | Product Pc.2 Unit II,Sec.I II & III."RFD Educational Problem Solving" | Product Pc. 2 Unit II,Sec.I, II & III."RFD Educational Problem Solving" |

| DATE | Process Facilitator Manuals | Training Guide and Materials | School Guide | School-Community Notebook | School Board Guide |
|---|---|---|---|---|---|
| APR 1 | | Product Pc.1 TRAINING GUIDE | | | |
| APR 11 | Product Pc.4 Unit II,Sec.III "Guidelines,Sample Instruments & Activity Options: Phases III, IV, V" | | | | |
| APR 15 | | Product Pc.2 "Sample Exercises Phases #4-7" | | | |
| APR 18 | Product Pc.5 Unit II,Sec.III "Guideline,Sample Instruments & Activity Options: Phases VI & VII" | | | | |
| APR 25 | Product Pc.6 Unit III "Transmission Guides to RFD Products" | | | | |
| APR 30 | | Product Pc.3 "Sample Exercises Phases #1-3" | Product Pc3 Unit III, Sec.I & II "S-C Process Handbook" | Product Pc.3 Unit III,Sec. I & II "S-C Process Handbook" | Product Pc 3 Unit III, Sec. I & II "S-C Process Hand-Handbook |
| APR 30 | | | Product Pc.4 Unit IV,Sec. I & II "Leadership & Admin." | Product Pc.4 Unit IV,Sec. I & II "Leadership & Admin." | Product Pc.4 Unit IV,Sec.I & II "Leadership & Admin." |

# APPENDIX C
# EXPLORATORY TEST SCHEDULE

## APPENDIX C

### Exploratory Test Schedule

Assumptions

1. A packet sent to reviewers will include the following:
   a. A copy of the goals and objectives of the product
   b. Two copies of the product piece
   c. A questionnaire for the product
   d. Any integral resource material referenced in the product piece.
2. Eight working days are allotted for editing and production time.
3. One calendar week is allotted for review of each product piece.

   Exceptions:

   a. Piece 1 of the Training Guide and Materials is allotted two calendar weeks for review time.
   b. Piece 2 of the Process Facilitator Manual will be mailed to reviewers during the time allotted for review of Piece 1 of the Training Guide and Materials. Due to this these two pieces should be reviewed concurrently during that time.
4. Six calendar days have been allotted for mailing time to and from reviewers.

Exploratory Test Schedule

| DATE | Process Facilitator Manuals | Training Guide and Materials | School Guide | School-Community Notebook | School Board Guide |
|---|---|---|---|---|---|
| MARCH 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |
| 5 | | | | | |
| 6 | Development Date, Piece 1 △ | | | | |
| 7 | | | Development Date, Piece 1 △ | | |
| 8 | | | | | |
| 9 | | | | | |
| 10 | | | | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | Development Date, Piece 1 △ | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | Development Date, Piece 2 △ | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | Development Date, Piece 3 △ | | | | Development Date, Piece 1 △ |
| 29 | | | | | |
| 30 | | | Development Date, Piece 2 △ | Development Date, Piece 2 △ | Development Date, Piece 2 △ |
| 31 | | | | | |

LEGEND

△ Development Date

○ Mailing Date to Reviewer

□ Reviewer Receives

* Data Received

| DATE | | Process Facilitator Manuals | Training Guide and Materials | School Guide | School-Community Notebook | School Board Guide |
|---|---|---|---|---|---|---|
| APRIL | 1 | | Development Date, Piece 1 Δ | | | |
| | 2<br>3<br>4<br>5<br>6<br>7 | | | | | |
| | 8 | Orientation meeting, Piece 1 received □ | Orientation meeting, Piece 1 received □ | | | |
| | 9 | Data received, Piece 1 * | | Orientation meeting, Pieces 1 & 2 received □ | Orientation meeting, Pieces 1 & 2 received □ | Orientation meeting, Pieces 1 & 2 received □ |
| | 10 | | | Data received Piece 1 * | Data received Piece 1 * | Data received Piece 1 * |
| | 11 | Development Date, Piece 4 Δ | | | | |
| | 12<br>13<br>14 | | | | | |
| | 15 | Mail Piece 2 to reviewer ○ | Development Date, Piece 2 Δ | Mail Piece 2 ○ to Reviewers | Mail Piece 2 ○ to Reviewers | Mail Piece 2 ○ to Reviewers |
| | 16<br>17 | | | | | |
| | 18 | Development Date, Piece 5 Δ Reviewer receives Piece 2 □ | | | | |
| | 19 | | | Data received Piece 2 * | Data received Piece 2 * | Data received Piece 2 * |
| | 20<br>21 | | | | | |
| | 22 | Mail Piece 3 to reviewer ○ | | | | |
| | 23<br>24 | | | | | |
| | 25 | Development Date, Piece 6 Δ Reviewer receives Piece 3 □ | Data received Piece 1 * | | | |
| | 26<br>27 | | | | | |
| | 28 | Data received Piece 2 * | | Data received Piece 2 * | Data received Piece 2 * | Data received Piece 2 * |
| | 29 | | Mail Piece 3 to reviewer ○ | | | |
| | 30 | | Development Date, Piece 3 Δ | Development Date, Pieces 3 and 4 Δ | Development Date, Pieces 3 and 4 Δ | Development Date, Pieces 3 and 4 Δ |

| DATE | | Process Facilitator Manuals | Training Guide and Materials | School Guide | School-Community Notebook | School Board Guide |
|---|---|---|---|---|---|---|
| MAY | 1 | | Reviewer receives Piece 2 | | | |
| | 2<br>3<br>4 | | | | | |
| | 5 | Data received Piece 3 * | | | | |
| | 6 | Mail Piece 4 to reviewer O | | | | |
| | 7<br>8 | | | | | |
| | 9 | Reviewer receives Piece 4 □ | | | | |
| | 10 | | | | | |
| | 11 | | Data received Piece 2 * | | | |
| | 12 | | | | | |
| | 13 | Mail Piece 5 to reviewer O | | Mail Piece 3 to reviewer O | Mail Piece 3 to reviewer O | Mail Piece 3 to reviewer O |
| | 14<br>15 | | | | | |
| | 16 | Reviewer receives Piece 5 □ | | Reviewer receives Piece 3 □ | Reviewer receives Piece 3 □ | Reviewer receives piece 3 □ |
| | 17<br>18 | | | | | |
| | 19 | Data received Piece 4 * | | | | |
| | 20 | | Mail Piece 3 to reviewer O | Mail Piece 4 to reviewer O | Mail Piece 4 to reviewer O | Mail Piece 4 to reviewer O |
| | 21<br>22 | | | | | |
| | 23 | | Reviewer receives Piece 3 □ | Reviewer receives Piece 4 □ | Reviewer receives Piece 4 □ | Reviewer receives Piece 4 □ |
| | 24<br>25 | | | | | |
| | 26 | Data received Piece 5 * | | Data received Piece 3 * | Data received Piece 3 * | Data received Piece 3 * |
| | 27 | Mail Piece 5 O to reviewer | | | | |
| | 28<br>29 | | | | | |
| | 30 | Reviewer receives Piece 6 □ | | | | |
| | 31 | | | | | |

| DATE | | Process Facilitator Manuals | Training Guide and Materials | School Guide | School-Community Notebook | School Board Guide |
|---|---|---|---|---|---|---|
| JUNE | 1 | | | | | |
| | 2 | | Data received Piece 3 * | Data received Piece 4 * | Data received Piece 4 * | Data received Piece 4 * |
| | 3<br>4<br>5<br>6<br>7<br>8 | | | | | |
| | 9 | Data received Piece 6 * | | | | |
| | 10<br>11<br>12<br>13<br>14<br>15<br>16<br>17<br>18<br>19<br>20<br>22<br>23<br>24<br>25<br>26<br>27<br>28<br>29<br>30 | | | | | |

# APPENDIX D
# EXPLORATORY TEST QUESTIONNAIRE

APPENDIX D

Dear Reviewer:

Enclosed you will find _____
of the RFD product: _____.
Your annotations and review of this product piece will provide important information for revision of the product.

This packet includes:

1. Two copies of the product piece
2. A list of the goals and objectives of this product piece
3. A questionnaire about the product piece
4. Any integral resource material referenced in the product piece

You should have received this packet by _____. We request that you return your annotations and the questionnaire in the self-addressed stamped envelope by _____. If problems arise, please contact us by phone (503/224-3650).

As you begin your review it would be helpful if you would read (reread) the following:

1. The goals and objectives of the complete product
2. The goals and objectives of the product piece
3. The questionnaire for the product piece

As you review the materials please annotate one copy of the product piece as completely as possible. Please write your comments adjacent to the appropriate section. In particular we would like you to point out <u>strengths</u> and <u>weaknesses</u> in relation to:

1. Theoretical underpinnings
2. Organization

3. Relevance

4. Clarity

5. Practical uses

6. Illustration/graphics

7. Examples

8. Continuity

9. Language level

Feel free to use the space on the back of the sheets, should you desire, and to be as pointed and expressive as you wish!

The second copy of the product piece is for you to keep so that you can gain an increasing sense of the total product as individual pieces are sent to you.

After annotating the one copy of the materials please fill out the questionnaire for the product piece. The questionnaire will focus on questions regarding the objectives, content, production and intended uses of the product piece. We feel that a combination of your open-ended comments on the product piece itself, and the more focused data from the questionnaire will give us a balanced and extensive set of suggestions from which we will write new product drafts.

When you have completed your review please mail:

1. The annotated product piece

2. The completed questionnaire for the product piece

3. Any comments on this review procedure

Thank you for your input and help in the development of a potentially useful educational product.

Sincerely,

Team Leader
Rural Education Program

Rural Education Program, NWREL
Product Test Questionnaire*

Product _____ Piece _____

Date _____ Reviewer's signature _____

INSTRUCTIONS

The purpose of this questionnaire is to obtain your opinion on several different aspects of the product in a way which we can summarize relatively easily and then use in revising the product. Your responses will be used by REP staff as they revise the product.

Please look through the entire questionnaire before responding. Most of the questions ask you to express your opinion on some aspect of the product by checking (X) a "yes" or "no" category. In some cases you will be asked to further explain your response.

The questionnaire accompanying each product piece will be essentially the same each time. There may be, however, a few questions toward the end which deal with some special concerns we have about the particular product piece you are reviewing.

If in your view a particular question is not applicable to the product piece you are reviewing, please write "NA" next to the question number. If you feel you lack sufficient information to answer the question, write "LSI" beside the question number.

We feel your critical comments and responses to the questions below, in addition to those made on the product piece, will be very helpful to us in revising our products.

If you need additional space for your comments for any question, please use the back side of the page.

*This questionnaire is designed for use during the Exploratory Testing phase of the RFD Strategy.



Northwest Regional Educational Laboratory
710 S.W. Second Avenue Portland, Oregon
97204 Telephone (503) 224-3650

This instrument meets NWREL guidelines for the Protection of Human Subjects.

A. Goals And Objectives Of The Product

1. You received a set of the goals and objectives for the total RFD Product (in the Product Specification Document presented at the orientation meeting) and a set of the goals and objectives for this product piece (included in this current review packet). Do you perceive any important discrepancies between these two sets of objectives? (Check either "yes" or "no")

| | YES | NO |
|---|---|---|
| 1. | ___ | ___ |

If YES, explain the discrepancies:

2. Are the goals and objectives of the product piece stated clearly and with sufficient detail so it is possible to determine success or failure of the product in meeting its objectives?

| | YES | NO |
|---|---|---|
| 2. | ___ | ___ |

If NO, explain which goals and objectives should be stated more clearly:

3. Are there goals or objectives which should be eliminated, added, or revised?

| | YES | NO |
|---|---|---|
| 3. | ___ | ___ |

If YES, list the goals or objectives under the appropriate category:

| To Be Added | To Be Eliminated | To Be Revised |
|---|---|---|
| | | |

4. Please make any further comments about the goals and objectives of the product piece here:

B. Content Of The Product

5. Does the content possess sufficient scope and detail to serve the purposes and the needs of intended users?

| | YES | NO |
|---|---|---|
| 5. | ___ | ___ |

If NO, explain the deficiencies as specifically as possible:

6. Do you feel that prospective users of this product would find the materials easy to read and understand (e.g., are the vocabulary and writing style appropriate for the prospective audiences)?

| | | |
|---|---|---|
| 6. | ___ | ___ |

If NO, explain the difficulties you perceive:

7. Does the content of the product piece match up with its goals and objectives?

| | | |
|---|---|---|
| 7. | ___ | ___ |

If NO, explain the inconsistencies:

8. Is there any material which should be added or eliminated in this product piece?

| | YES | NO |
|---|---|---|
| 8. | ___ | ___ |

If YES, explain what materials should be added or eliminated:

| Material To Be Added | Material To Be Eliminated |
|---|---|
| | |

9. Is the content of this product piece appropriate for a rural education setting?

| | | |
|---|---|---|
| 9. | ___ | ___ |

If NO, explain what is inappropriate:

10. Do you know of any similar product(s) which we could use in lieu of this product piece?

| | | |
|---|---|---|
| 10. | ___ | ___ |

If YES, what are those similar products?

11. Please make any further comments about the content of the product piece here:

C. Intended Uses Of The Product

12. Does the product piece adequately consider the important characteristics of those people with whom it will be used?

| | YES | NO |
|---|---|---|
| 12. | ___ | ___ |

If NO, what characteristics are not adequately considered?

13. Based on your understanding of the RFD Strategy, would you consider the use of this piece essential to the RFD Strategy?

| | YES | NO |
|---|---|---|
| 13. | ___ | ___ |

If NO, why not?

14. Do you think that the resource material, referenced in the product piece and sent to you, is adequate to meet the needs of intended users?

| | YES | NO |
|---|---|---|
| 14. | ___ | ___ |

If NO, what additional materials do you view as essential resources?

15. Has enough information been provided for intended users to identify and use additional resources (e.g., people, agencies, literature, etc.) besides those included in the materials?

| | YES | NO |
|---|---|---|
| 15. | ___ | ___ |

If NO, what suggestions do you have for additional information?

16. Please make any further comments about the product's intended uses here:

D. Format And Graphics Of The Product

17. Is the material appropriately sequenced within this product piece?

| | YES | NO |
|---|---|---|
| 17. | ___ | ___ |

If NO, explain inappropriate sequences:

18. Does the table of contents as shown in the product specifications provide a detailed and easy reference to sections of this product piece?

| | | |
|---|---|---|
| 18. | ___ | ___ |

If NO, suggest ways to improve it:

19. Are the charts and graphs for this product piece easy to read and understand?

| | | |
|---|---|---|
| 19. | ___ | ___ |

If NO, specify what changes would improve their clarity:

20. Are changes needed in the general graphic layout of this product piece, the paper color, or drawings and symbols to make them appropriate for a rural education setting?

| | YES | NO |
|---|---|---|
| 20. | ___ | ___ |

If YES, what changes would you suggest?

21. Do the visual aids of the product piece promote better understanding of the content material?

| | YES | NO |
|---|---|---|
| 21. | ___ | ___ |

If NO, what changes could improve understanding of the content material?

22. Are the headlines and titles satisfactory for helping to organize and reference the content sections?

| | YES | NO |
|---|---|---|
| 22. | ___ | ___ |

If NO, what would improve the headlines and titles?

23. Does format of the product facilitate modifying, removing or adding materials?

| | YES | NO |
|---|---|---|
| 23. | ___ | ___ |

If NO, what changes should be made?

24. Please make any further comments about the product format and graphics here:

E. Specific Concerns About The Process Facilitator Manuals

25. Is enough information provided in this product piece about the role of each of the following groups in the RFD Strategy?

| | | YES | NO |
|---|---|---|---|
| (1) State Education Agency | 25. (1) | ___ | ___ |
| (2) Regional Educational Agency | (2) | ___ | ___ |
| (3) Local School Administrators | (3) | ___ | ___ |
| (4) Process Facilitators | (4) | ___ | ___ |
| (5) School Staff | (5) | ___ | ___ |
| (6) School Board | (6) | ___ | ___ |
| (7) School-Community Group | (7) | ___ | ___ |

If you gave a NO response to any of the above, what additional information do you think is needed?

26. Is enough information provided in this product piece about the relationship of the process facilitator to each of the following groups?

| | | | |
|---|---|---|---|
| (1) State Education Agency | 26. (1) | ___ | ___ |
| (2) Regional Educational Agency | (2) | ___ | ___ |
| (3) Local School Administrators | (3) | ___ | ___ |
| (4) School Staff | (4) | ___ | ___ |
| (5) School Board | (5) | ___ | ___ |
| (6) School-Community Group | (6) | ___ | ___ |

If you gave a NO response to any of the above, what additional information do you think is needed?

27. Are the self-assessment tools, if any, included in this product piece appropriate in number and kind?

| | YES | NO |
|---|---|---|
| 27. | ___ | ___ |

If NO, how could they be improved?

28. Does the product piece provide enough information about sources of support and resources needed to carry out process facilitator tasks?

| | YES | NO |
|---|---|---|
| 28. | ___ | ___ |

If NO, what additional information is needed?

PLEASE GO TO ITEM 32 WHICH BEGINS THE SUMMARY CONCERNS ABOUT THE PRODUCT

F. Summary Concerns About The Product

32. Does this material "turn you on" (i.e., if you were not a reviewer, would you read this material)?

| | YES | NO |
|---|---|---|
| 32. | ___ | ___ |

If NO, what would make it more interesting?

33. What positive or negative side effects might you expect from the use of this product piece?

| Positive | Negative |
|---|---|
| | |

34. What is your overall recommendation concerning this product piece (check one)?

(a) ___ I consider the changes I have suggested relatively minor and would recommend that this product piece be included in the total product pretty much as it is.

(b) ___ I consider that some of the changes I have suggested are rather major and would recommend that this piece be significantly revised (as indicated in my preceding comments and/or on the annotated copy) before inclusion in the total product.

(c) ___ I recommend that the development of this entire product cease.

35. Summarize below your general impressions of this product piece. If you selected alternative (b) in question 34 above, please specify the major changes you would suggest for the product piece.

G. Specific Questions For NWREL Employees

36. Is this product consistent with the values and standards of the Northwest Regional Educational Laboratory?

| | YES | NO |
|---|---|---|
| 36. | ___ | ___ |

If NO, what changes are needed to meet these values and standards?

37. (To be answered only by REP staff)
Is this product consistent and compatible with other products in regard to the following criteria?

| | | YES | NO |
|---|---|---|---|
| (1) | Values | 37. (1) ___ | ___ |
| (2) | Style | (2) ___ | ___ |
| (3) | Terminology | (3) ___ | ___ |
| (4) | Format | (4) ___ | ___ |

If you gave a NO response to any of the above, what changes would make the product more compatible with other RFD products?